

## BIRDS IN AND AROUND MACFAST CAMPUS, THIRUVALLA, KERALA

P. M. NISHAD<sup>1</sup> & P. GREESHMA<sup>2</sup>

<sup>1</sup>Department of Computer Applications, Macfast College, Thiruvalla, Pathanamthitta, Kerala

<sup>2</sup>Department of Wildlife Biology, Kerala Forest Research Institute, Peechi, Thrissur, Kerala

### ABSTRACT

Avifaunal diversity of MACFAST campus and adjoining areas were carried out during March 2016 to June 2017. Ponds, grasslands, rooftops of buildings, playground and paddy fields were the major microhabitats of the study area. Birds were observed using Bushnell binocular (10 x 50), spotting scope (10x- 45x) and identified using physical features with the help of field guides and reference books. A total of 88 species from 12 orders and 38 families were recorded during the study and among these, Passeriformes and Pelicaniformes, dominated the list with 31 and 14 species, respectively. Three species of Near Threatened category (*Mycteria leucocephala*, *Anhinga melanogaster*, *Threskiornis melanocephalus*) and *Ciconia episcopus* from Vulnerable category were also recorded. Pompadour Green Pigeon *Treron pompadora*, Lesser coucal *Centropus bengalensis*, Pied Cuckoo *Clamator jacobinus*, Baillon's Crake *Zapornia pusilla*, White-browed Wagtail *Motacilla maderaspatensis*, Chestnut-tailed Starling *Sturnia malabarica* and Indian Paradise-flycatcher *Terpsiphone paradise* were the important sightings, during the survey. The presence of indigenous fruiting trees along with large trees as roosting sites, attract more birds to the campus.

**KEYWORDS:** Birds-Diversity- Macfast Campus-Thiruvalla-Kerala

**Received:** Sep 15, 2017, **Accepted:** Sep 30, 2017, **Published:** Oct 13, 2017, **Paper Id:** IJZROCT20173

### INTRODUCTION

Birds are always a fascinating creature, which adds up the beauty of nature. Avifauna of MACFAST campus and adjoining areas were studied from March 2016 to June 2017. Mar Athanasios College for Advanced Studies (MACFAST) (9° 22' 23" N & 76° 35' 4"E) in Pathanamthitta District is located about 3 km to the South of Thiruvalla town. The campus has varied micro habitats like ponds, grasslands, roof top of buildings, playground and paddy fields. The vegetation is dominated by *Racosperma auriculiforme*, *Anacardium occidentale*, *Artocarpus heterophyllus*, *Racosperma mangium*, *Nephelium lappaceum*, *Artocarpus hirsutus*, *Ficus auriculata*, *Flacourtia jangomas*, *Mangifera indica*, *Bamboo Sps.*, *Cocos nucifera*, *Azadirachta indica*, *Syzygium jambos*, *Phyllanthus emblica*, *Carica papaya*, *Cassia fistula*, *Sapindus emarginatus*, *Corypha umbraculifera*, *Lagerstroemia microcarpa*, *Tectona grandis*, *Macaranga indica*, *Bauhinia racemosa*, *Albizia chinensis*, *Delonix regia*, *Muntingia calabura*, *Averrhoa carambola*, *Elaeocarpus serratus*, *Manilkara zapota* and *Artocarpus incisives*. Aquatic weeds like *Eichhornia crassipes*, *Salvinia molesta* were also present in water bodies near paddy fields.

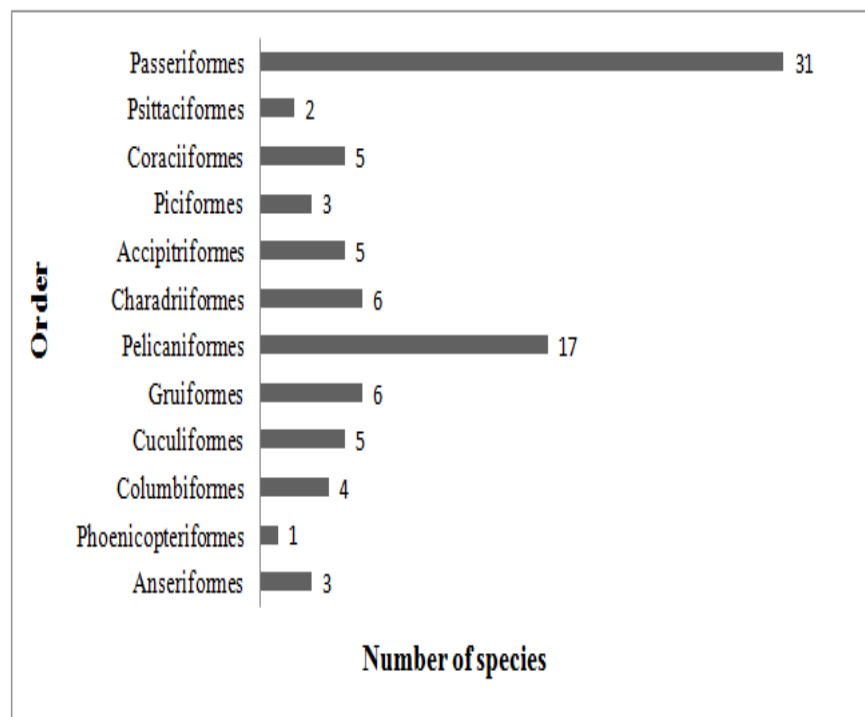
### METHODOLOGY

Birds were observed alone as well as in a team using Bushnell binocular (10 x 50), spotting scope (10 x- 45 xs) and identified using physical features, with the help of field guides and reference books (Ali & Ripley 1978; Grimmett *et al.* 2011). Observations were made from 06.00 hrs to 10.00 hrs and 16.00 hrs to 19.00 hrs, once in

every week.

## RESULTS

A total of 88 species from 12 orders and 38 families were recorded during the study (Table 1). Out of 500 species of Kerala (Praveen 2015), 17.6 % of bird species were reported from this region. Of these 12 orders, Passeriformes, Pelicaniformes dominated the list with 31 and 14 species, respectively (Figure.1).



**Figure 1: Number of Species Representing the Respective Orders from MACFAST Campus**

Among the species recorded, 51% comprised of resident birds followed by 33% of local migrants and 16 % of migratory birds. Of these, 47 species were wetland dependent birds and 41 species terrestrial birds. Little cormorant *Microcarbo niger*, Indian pond heron *Ardeola grayii*, Grey-headed swamphen *Porphyrio poliocephalus*, White-throated Kingfisher *Halcyon smyrnensis*, Black Drongo *Dicrurus macrocercus* were the most abundantly seen resident birds. Three species of Near Threatened category (*Mycteria leucocephala*, *Anhinga melanogaster*, *Threskiornis melanoccephalus*) and Woolly-necked Stork *Ciconia episcopus*, from Vulnerable category were also recorded. Pompadour Green Pigeon *Treron pompadora*, Lesser coucal *Centropus bengalensis*, Pied Cuckoo *Clamator jacobinus*, Baillon's Crake *Zapornia pusilla*, White-browed Wagtail *Motacilla maderaspatensis*, Chestnut-tailed Starling *Sturnia malabarica*, Indian Paradise-flycatcher *Terpsiphone paradise* were the important sightings. The paddy fields serve as an important foraging ground for several groups of birds like herons, ducks, cormorants, storks etc. Apart from foraging, hundreds of birds choose their resting place in this campus.

## DISCUSSION AND CONCLUSIONS

During the study it was observed that the campus and adjoining areas had a rich variety of vegetation. The presence of indigenous fruiting trees, along with large trees as roosting sites, attract more birds to the campus. Least

disturbances to the habitat and conservation awareness among the college people had led to the safe movement of birds all the time in the campus. Bird diversity at MACFAST campus and adjoining areas is unexplored yet and hence this work to record the avian diversity will form the base line information for future studies.

## REFERENCES

1. Ali, S. & S. D. Ripley. (1978). *Hand book of the Birds of India and Pakistan*. Oxford University Press, London, New York
2. Grimmet, R., C. Inskipp & T. Inskipp. (2011). *Birds of the Indian Subcontinent*. Oxford University Press, Mumbai
3. Praveen, J (2015). A checklist of birds of Kerala, India. *Journal of Threatened Taxa*, 7(13): 7983–8009

## APPENDICES

## ACKNOWLEDGEMENTS

We are thankful to The Principal Rev. Fr. Pradeep Vazhatharamalayil and Mr. Pavin Thadathil, MACFAST College, for the infrastructural support. Our sincere gratitude to Mr. Rafy Kalletumkara and Mr. Praveen E. S. for helping in identification and Kerala State Council for Science Technology and Environment for providing financial aids.

**Table 1: Checklist of Birds from MACFAST Collge Campus, Thiruvalla, Kerala**

Order	Family	Sl. No	Common Name	Scientific Name	IUCN
Anseriformes	Anatidae	1	Lesser Whistling-Duck	<i>Dendrocygna javanica</i>	LC
		2	Cotton Pygmy-Goose	<i>Nettapus coromandelianus</i>	LC
		3	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	LC
Phoenicopteriformes	Podicipedidae	4	Little Grebe	<i>Tachybaptus ruficollis</i>	LC
Columbiformes	Columbidae	5	Rock Pigeon	<i>Columba livia</i>	LC
		6	Spotted Dove	<i>Streptopelia chinensis</i>	LC
		7	Yellow-footed Pigeon	<i>Treron phoenicopterus</i>	LC
		8	Pompadour Green Pigeon	<i>Treron pompadora</i>	LC
Cuculiformes	Cuculidae	9	Greater Coucal	<i>Centropus sinensis</i>	LC
		10	Lesser coucal	<i>Centropus bengalensis</i>	LC
		11	Pied Cuckoo	<i>Clamator jacobinus</i>	LC
		12	Asian Koel	<i>Eudynamys scolopaceus</i>	LC
		13	Indian Cuckoo	<i>Cuculus micropterus</i>	LC
Gruiformes	Rallidae	14	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC
		15	Baillon's Crane	<i>Zapornia pusilla</i>	LC
		16	Watercock	<i>Gallicrex cinerea</i>	LC
		17	Gray-headed Swampphen	<i>Porphyrio porphyrio</i>	LC
		18	Common Moorhen	<i>Gallinula chloropus</i>	LC
		19	Common Coot	<i>Fulica atra</i>	LC
elicaniformes	Ciconiidae	20	Asian Openbill	<i>Anastomus oscitans</i>	LC
		21	Woolly-necked Stork	<i>Ciconia episcopus</i>	VU
		22	Painted Stork	<i>Mycteria leucocephala</i>	NT
	Ardeidae	23	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	LC
		24	Grey Heron	<i>Ardea cinerea</i>	LC
		25	Purple Heron	<i>Ardea purpurea</i>	LC
		26	Great Egret	<i>Ardea alba</i>	LC

		27	Intermediate Egret	<i>Ardea intermedia</i>	LC
		28	Little Egret	<i>Egretta garzetta</i>	LC
		29	Western Reef-Heron	<i>Egretta gularis</i>	LC
		30	Cattle Egret	<i>Bubulcus ibis</i>	LC
		31	Indian Pond-Heron	<i>Ardeola grayii</i>	LC
	Threskiornithidae	32	Glossy Ibis	<i>Plegadis falcinellus</i>	LC
		33	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT
	Phalacrocoracidae	34	Little Cormorant	<i>Microcarbo niger</i>	LC
		35	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC
	Anhingidae	36	Oriental Darter	<i>Anhinga melanogaster</i>	NT
Charadriiformes	Recurvirostridae	37	Black-winged Stilt	<i>Himantopus himantopus</i>	LC
	Charadriidae	38	Red-wattled Lapwing	<i>Vanellus indicus</i>	LC
	Jacanidae	39	Bronze-winged Jacana	<i>Metopidius indicus</i>	LC
	Scolopacidae	40	Common Snipe	<i>Gallinago gallinago</i>	LC
		41	Marsh Sandpiper	<i>Tringa stagnatilis</i>	LC
		42	Wood Sandpiper	<i>Tringa glareola</i>	LC
Accipitriformes	Accipitridae	43	Crested Serpent Eagle	<i>Spilornis cheela</i>	LC
		44	Eurasian Marsh-Harrier	<i>Circus aeruginosus</i>	LC
		45	Shikra	<i>Accipiter badius</i>	LC
		46	Brahminy Kite	<i>Haliastur indus</i>	LC
		47	Black Kite	<i>Milvus migrans</i>	LC
Piciformes	Picidae	48	Common Golden-backed Woodpecker	<i>Dinopium javanense</i>	LC
		49	Lesser Golden-backed Woodpecker	<i>Dinopium benghalense</i>	LC
	Ramphastidae	50	White-cheeked Barbet	<i>Psilopogon viridis</i>	LC
Coraciiformes	Meropidae	51	Blue-tailed Bee-eater	<i>Merops philippinus</i>	LC
	Alcedinidae	52	Common Kingfisher	<i>Alcedo atthis</i>	LC
		53	Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC
		54	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	LC
		55	Pied Kingfisher	<i>Ceryle rudis</i>	LC
Psittaciformes	Psittaculidae	56	Rose-ringed Parakeet	<i>Psittacula krameri</i>	LC
		57	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	LC
Passeriformes	Artamidae	58	Ashy Woodswallow	<i>Artamus fuscus</i>	LC
	Oriolidae	59	Indian Golden Oriole	<i>Oriolus kundoo</i>	LC
		60	Black-hooded Oriole	<i>Oriolus xanthornus</i>	LC
	Dicruridae	61	Black Drongo	<i>Dicrurus macrocercus</i>	LC
		62	Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i>	LC
	Aegithinidae	63	Common Iora	<i>Aegithina tiphia</i>	LC
	Corvidae	64	Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC
		65	House Crow	<i>Corvus splendens</i>	LC
	Monarchidae	66	Indian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	LC
	Dicaeidae	67	Pale-billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>	LC
	Nectariniidae	68	Purple-rumped Sunbird	<i>Leptocoma zeylonica</i>	LC
		69	Little Spiderhunter	<i>Arachnothera longirostra</i>	LC
		70	Loten's Sunbird	<i>Cinnyris lotenius</i>	LC

	Estrildidae	71	Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC
		72	Black-headed Munia	<i>Lonchura malacca</i>	LC
		73	White-rumped Munia	<i>Lonchura striata</i>	LC
	Passeridae	74	House Sparrow	<i>Passer domesticus</i>	LC
	Motacillidae	75	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC
		76	Grey Wagtail	<i>Motacilla cinerea</i>	LC
	Cisticolidae	77	Common Tailorbird	<i>Orthotomus sutorius</i>	LC
		78	Ashy Prinia	<i>Prinia socialis</i>	LC
	Acrocephalidae	79	Blyth's Reed-Warbler	<i>Acrocephalus dumetorum</i>	LC
	Pycnonotidae	80	Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC
		81	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	LC
	Leiothrichidae	82	Jungle Babbler	<i>Turdoides striata</i>	LC
	Hirundinidae	83	Barn Swallow	<i>Hirundo rustica</i>	LC
		84	Wire-tailed Swallow	<i>Hirundo smithii</i>	LC
	Sturnidae	85	Rosy Starling	<i>Pastor roseus</i>	LC
		86	Chestnut-tailed Starling	<i>Sturnia malabarica</i>	LC
		87	Common Myna	<i>Acridotheres tristis</i>	LC
	Muscicapidae	88	Oriental Magpie-Robin	<i>Copsychus saularis</i>	LC

